

CAMP RICHARDSON MARINA STORM WATER POLLUTION PREVENTION PLAN

This Storm Water Pollution Prevention Plan (SWPPP) for the Camp Richardson Marina is submitted to the Lahontan Regional Water Quality Control Board (Lahontan RWQCB) in compliance with Board Order No. 6-00-36, National Pollutant Discharge Elimination System General Permit NPDES CA CAG616003, for discharges of storm water runoff associated with industrial activity at marinas on Lake Tahoe. This SWPPP has been designed to comply with Federal requirements to implement best management practices (BMPS) to achieve compliance with effluent limits and receiving water objectives.

1. Objectives

The SWPPP has been developed, and will be amended when necessary, to meet the following objectives:

- a. to identify and evaluate sources of pollutants associated with industrial activities being conducted at the facility that may affect the quality of storm water discharges and prevent non-storm water discharges from the facility; and,
- b. to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and non-storm water discharges.

BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, runoff controls, overhead coverage.)

2. Planning and Organization

- a. Pollution Prevention Team

The Camp Richardson Marina storm water pollution prevention team consists of Matt Bishop, Marina Manager, who is responsible for all daily operations, employee training and supervision.

- b. Other Requirements and Existing Facility Plans

The following other plans and reports for regulatory agencies are incorporated by reference into this SWPPP:

- i. Camp Richardson Marina Storm Water Monitoring Plan prepared for and submitted to the Lahontan RWQCB per Board Order No. 6-00-36 and National Pollutant Discharge Elimination System General Permit NPDES CA CAG616003. This plan includes

monitoring programs assure compliance with storm water discharge requirements and non-storm water discharge restrictions.

- ii. Camp Richardson Marina Spill Prevention Control & Countermeasure (SPCC) Plan prepared in accordance with the provisions of 40 CFR part 112, addressing petroleum product storage and dispensing, and certified by a professional engineer. This plan includes storm water pollutant control measures associated with potential spills of petroleum products stored on-site.
- iii. Camp Richardson Marina Business Plan for hazardous materials filed with the El Dorado County Environmental Management Department. This plan includes an inventory of hazardous materials used on-site, their quantity, location and handling procedures/ precautions for use to avoid environmental hazards.
- iv. Camp Richardson Marina Outdoor Boat Repair Procedure Outline adopted as a condition of approval of the Special Use Permit for marina operation in 1998. The procedure outline requires:
 1. Boat Repairs - No discharge of contaminating or potentially contaminating materials (liquid or solid) shall be allowed to reach the parking lot surface. Such materials include but are not limited to: petroleum products, soap or detergent, bilge water, *etc.* All such materials shall be collected in an appropriate container, stored and disposed of in an approved manner. Only clean water may be “discharged” in the parking lot.
 2. Boat Washing - Only clean water “rinsing” shall be allowed in the parking lot (no detergents or soaps allowed).

3. Site Map

Figure 1 - Spill Plan Map from the SPCC Plan identifies the parking lot, storage yard, above ground fuel storage tanks and buildings as well as the storm water collection and treatment system. There are no municipal storm drain facilities serving the site.

The marina is adjacent to Camp Richardson Resort to the west and Jameson Beach residential area to the east. The marina parking low point (sump and pump) is the lowest point in the marina’s vicinity so larger storm water flows which are not infiltrated on the off-site properties, from both the east and west, can flow on to the marina property. These waters are not expected to include any significant pollutants since neither adjacent property supports any “industrial activities.”

Areas of “industrial activity” include the parking lot and storage yard area which are used for shipping and receiving activities, and boat storage. The fuel storage tanks are also located in the paved storage yard area.

No erodible “industrial activity” materials are directly exposed to precipitation and no significant spills or leaks have occurred at the marina.

4. List of Significant Materials

The SWPPP list of significant materials handled and stored at the site is provided in Worksheet 1 (attached following this narrative).

5. Description of Potential Pollutant Sources

The “industrial activity” occurring at the marina is the fueling, operation and maintenance of water craft (see Worksheet 2). Most activities, including fueling, pump-out and operation of boats occurs from the pier and cannot contribute to storm water run-off. These activities are conducted in compliance with the BMPs listed in Attachments F and G from the General Permit. The entire fuel storage and delivery system is double-walled and meets current codes for such facilities. The required SPCC Plan and been prepared and implemented.

Boat repair and maintenance occurs either at the Marine Center, within the building or in the parking lot (major work), or within the floating boat. Both locations allow the containment of any spills which are then properly cleaned-up and clean-up materials properly disposed of. A boat ramp allows boats to be easily launched/removed from the water for repairs. Storm water does not affect these repair and maintenance locations.

Activities with a potential to contribute pollutants to storm water discharges are those which occur in the parking lot: fuel deliveries to the fuel storage tanks, delivery or removal of oil stored in the Marine Center building, and boat washing. Spill prevention measures and procedures for the stored petroleum products are fully described in the SPCC Plan. Boat washing uses no soap or detergents. Wash water flows into the on-site storm water treatment facilities. Employees are careful to not allow wash water flow to the lake.

The parking lot can also collect oil and sands deposited by vehicles parked in the lot. These pollutants could be then washed off with storm water. These materials are routed through the primary on-site treatment facilities (sand/oil separators) which separate the pollutants from the water which then receives secondary treatment and is infiltrated in the basin.

Except for fuel and oil, no significant materials are stored at the marina. No significant dust or particle generating activities are conducted at the marina. No significant leaks have occurred at the marina.

No soil erosion occurs due to industrial activity. Landward activities occur on a paved parking lot with permanent drainage facilities, including run-off treatment BMPs consistent with Lahontan RWQCB standards for the Lake Tahoe Basin. Parking lot run-off flows to an initial 1,350 gallon sand/oil separator, through a second 1,500 gallon sand/oil separator to a 620 gallon pump vault from which it is pumped to an approximately 31,850 gallon infiltration/treatment basin. These BMPs are monitored and maintained pursuant to an approved schedule. Parking barriers eliminate vehicle travel off the paved surface, to minimize tracking of sand and sediments onto the parking lot.

6. Assessment of Potential Pollutant Sources

Potential pollutant sources and BMPs are identified in the narrative above and Worksheet 2.

7. Storm Water Best Management Practices

The existing storm water BMPs on-site include the paved parking area, storm water collection and treatment facilities. Treatment includes sand/oil separator vaults (totaling 2,850 gallons) and a retention/infiltration treatment basin. Together these BMPs provide treatment for all potential pollutants from the parking lot: sand, oil, and wash water. These structural BMP were sized, designed, approved and constructed pursuant to the regulations of the Lahontan RWQCB. No additional structural BMPs are planned.

In addition, non-structural BMPs, consisting of the following processes, prohibitions, procedures, schedule of activities, *etc.*, that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges, have been considered and adopted:

- a. Good Housekeeping - Good housekeeping generally consists of practical procedures to maintain a clean and orderly facility. The parking lot and all other areas (fuel dock, boat launch hoist, *etc.*) with the potential to release pollutants to storm water or directly to Lake Tahoe are kept orderly and clean.
- b. Preventive Maintenance - Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, *etc.*) as well as other facility equipment and systems. The sand/oil separators receives regular inspection and maintenance (2x year) per a prescribed maintenance schedule. The infiltration basin and other components of the drainage system are monitored per the prescribed schedule in the Camp Richardson Marina Monitoring Plan as required by the General Permit.
- c. Spill Response - This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak. Two spill response plans have been developed and implemented at the marina: a spill contingency plan consistent with the requirements of the Lahontan RWQCB and an SPCC Plan consistent with the requirements on facilities with significant above ground fuel storage (40 CFR part 112).
- d. Material Handling and Storage - This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges. Petroleum products are stored with double containment and the fuel dispensing system is entirely double-walled. No other significant materials are stored or handled at the marina.
- e. Employee Training - This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. All new hires are instructed in spill

prevention, spill response and clean-up, and spill reporting at the beginning of their employment. Walk-through inspections of marina facilities are conducted weekly and used as continuing training sessions for employees.

- f. Waste Handling/Recycling - This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials. Used oil and spill clean-up materials are collected and disposed of by a licensed waste hauler/recycler.
- g. Record Keeping and Internal Reporting - This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, *etc.*, are developed, retained, and provided, as necessary, to the appropriate facility personnel. Inspection checklists have been included with the Monitoring Plan and SPCC Plan to provide records of inspections completed, any problems found and actions taken to fix those problems. Records are kept on-site in the marina office.
- h. Erosion Control and Site Stabilization - This includes a description of all sediment and erosion control activities. "Industrial activities" subject to storm water run-off are limited to the paved parking lot. The paved surface stabilizes this portion of the site.
- i. Inspections - This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. The fuel tanks and oil storage shed are the pollutant sources located on-site. These are inspected, and any required corrections made, in accordance with the SPCC Plan.
- j. Quality Assurance - This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted. Quality assurance is implemented by the Marina Operator who oversees all operations at the marina.

8. Annual Comprehensive Site Compliance Evaluation

Annual comprehensive site compliance evaluations are completed in the Fall in conjunction with the annual reporting requirement of the General Permit and Spring during the site visit inspection by Lahontan RWQCB staff. The Annual Report provides a written record of inspections, evaluations and activities at the marina. It also provides certification that the facility operator is in compliance with the General Permit. If the certification cannot be provided, this is explained in the Annual Report.

9. SWPPP General Requirements

The following general requirements for all SWPPPs are established by the Lahontan RWQCB:

- a. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Board.
- b. The SWPPP shall identify the existing storm water BMPs already in place at the marina [**see Sec. 7 above**] and new BMPs [**none**] that are needed at the marina in order to further reduce

and prevent pollutants in storm water and non-storm water discharges. The new BMPs that are identified by the marina operator in the SWPPP shall be implemented by **October 15, 2003.**


- c. The Regional Board may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Board the facility operator shall submit a SWPPP revision and implementation schedule that meets the minimum requirements of this Section to the Regional Board. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Board that the revisions have been implemented.
- d. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- e. The SWPPP should also be amended if it is in violation of any condition of this General Permit, or has not achieved the general objectives of controlling pollutants in storm water discharges. The amended SWPPP shall be submitted no later than 30 days after the determination of violation or non-achievement to the Regional Board Executive Officer for review and approval.

10. Public Access

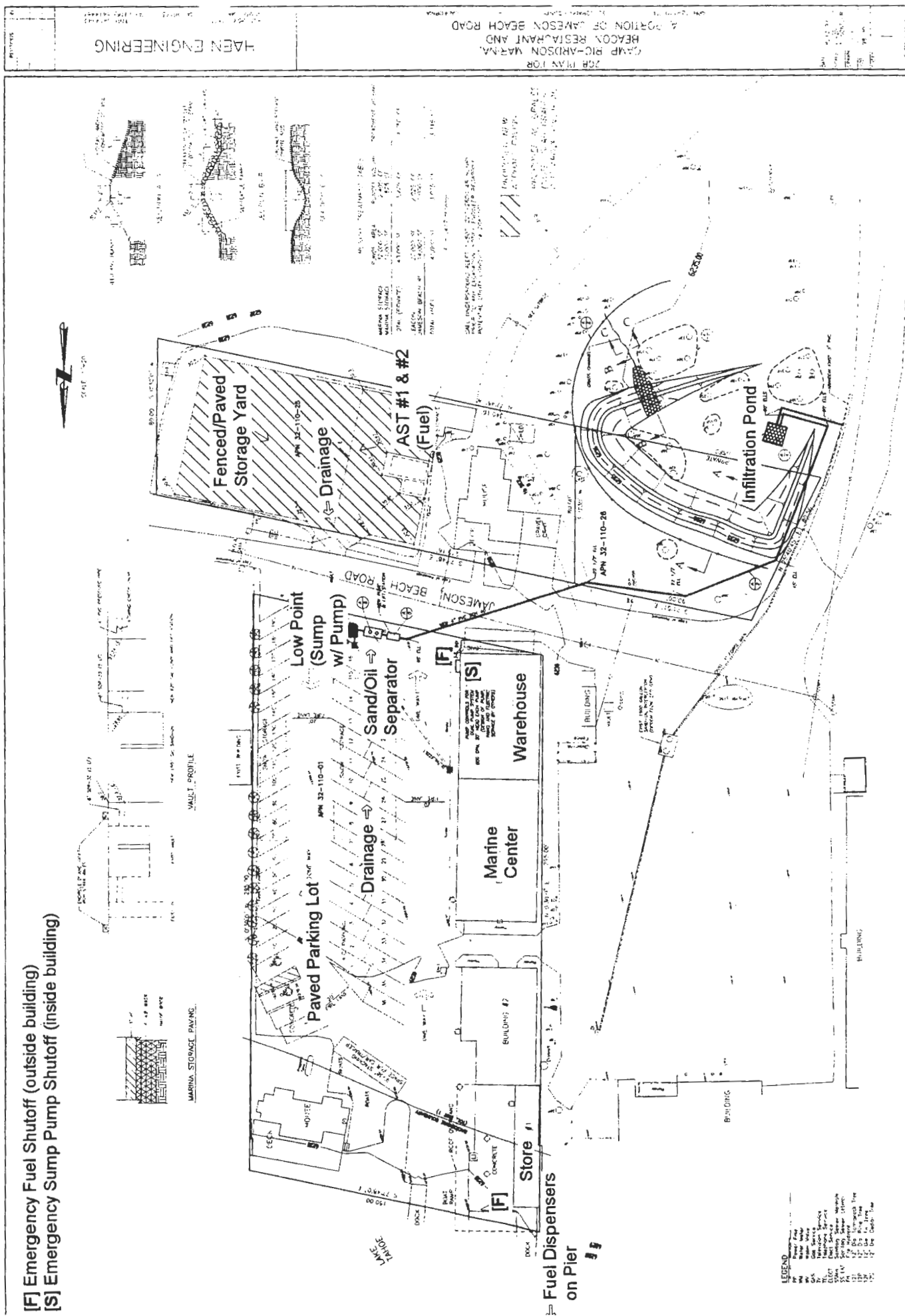
The SWPPP is considered a report that shall be available to the public under Section 308(b) of the Clean Water Act. Upon request by members of the public, the marina operator shall make available for review a copy of the SWPPP directly to the requester.

11. Preparer

This SWPPP was prepared by: Jay Kniep, AICP, Consultant/Agent for Camp Richardson Marina and initially submitted to the Regional Board on November 15, 2000.

Signature: 

[F] Emergency Fuel Shutoff (outside building)
[S] Emergency Sump Pump Shutoff (inside building)



WORKSHEET 1

LIST OF SIGNIFICANT MATERIALS HANDLED AND STORED AT THE SITE

Instructions: List all the materials stored and handled onsite. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff. Also complete Worksheet 3 if the material has been exposed in the last 3 years.

Material	Purpose/Use	Quantity	Stored	Handled	Frequency	Disposal
Unleaded Gasoline	Boat Fuel	4,000 gal.	AST in Storage Yard	Fuel Dock on Pier	Summer Season	n/a
Diesel Fuel	Equipment Fuel	1,000 gal.	AST in Storage Yard	Dispenser on AST	Year Round	
Lubricating Oil/Solvents	Boat Engine Lubrication & Maintenance	100 gal.	Marine Center Bldg.	in Boat Engine Compartments in Parking Lot	Summer Season	Oil Disposal Co.

Indicate on the site map where these materials are stored, handled, and disposed. Also indicate if materials are exposed to precipitation or if materials are within the path of storm water runoff.

Worksheet 1
Prepared by: Jay Kniep **Date:** November 15, 2000

WORKSHEET 2

ASSESSMENT OF POTENTIAL POLLUTANT SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES

Instructions: Provide a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. Also include the Best Management Practices implemented onsite (*i.e.*, non-structural BMPs-good housekeeping, preventive maintenance, spill response, daily site inspections or structural BMPs-overhead coverage, secondary containment structures, *etc.*) to prevent pollutants from entering storm water or surface waters.

Activity	Location of Activity	Pollutant Source	Pollutant	Applicable Best Management Practice (BMP)
Boat Fueling	Fuel Dock on Pier	Spills/Leaks During Fueling	Fuel, Oil	-Only trained employees operate fuel dispenser -Absorbent materials available to clean-up -BMPs in Attachment F
Fuel/Oil Storage	Parking Lot	Spills/Leaks During Delivery/Removal or from Storage Container	Fuel, Oil	-Double contained storage -Delivery/removal by trained personnel -SPCC plan in place
Boat Maintenance/Repair	In Boat or In Marine Center (bldg. or parking lot)	Spills/Leaks During Repair	Fuel, Oil, Maintenance or Repair Materials	-Activity in contained area: boat itself or enclosed boat house -Absorbent materials available on-site -Procedures in Outdoor Boat Repair Procedure Outline
Boat Washing	Parking Lot	Wash Water	Wash Water	-Conduct where water drains to drain/treatment system -Soap or detergent not allowed

Worksheet 2
Prepared by: Jay Kniep Date: November 15, 2000

JAY KNIEP

P.O. Box 624501, South Lake Tahoe, Calif. 96154

LAND PLANNING

phone/fax (530) 541-1817

November 15, 2000

Ms. Mary Fiore
Lahontan RWQCB
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150


RE: SWPPPs for Marinas

Dear Mary:

Please find enclosed Draft SWPPPs for Camp Richardson, Meeks Bay and Timber Cove Marinas. Bob Hassett will be submitting Annual Reports under separate cover.

If you have any questions regarding the enclosed, please give me a call.

Sincerely,



Jay Kniep, AICP

cc: Chris Knox, Camp Richardson Resort
Bob Hassett, Action Watersports of Tahoe

CAMP RICHARDSON RESORT MARINA MONITORING PROGRAM

1. Introduction

This Monitoring Program for the Camp Richardson Resort Marina is submitted to the Lahontan Regional Water Quality Control Board (Lahontan) in compliance with Board Order No. 6-00-36, National Pollutant Discharge Elimination System General Permit NPDES CA CAG616003, for discharges of storm water runoff associated with industrial activity and maintenance dredging at marinas.

The Camp Richardson Resort Marina is owned and operated by Camp Richardson Resort, Inc. (Marina Operator). The Marina Manager, Matt Bishop, is the on-site person with primary responsibility for implementing this Monitoring Program. The marina layout and drainage areas are identified in Map 1, attached.

The marina has been retro-fitted with a drainage system complying with the Best Management Practices (BMPs) mandated by Lahontan and the Tahoe Regional Planning Agency. This system collects run-off from impervious areas, treats it in a sand/oil interceptor and pumps it to a retention/infiltration pond from which it filters into the ground. Because of this system, storm water discharges to Lake Tahoe are limited to run-off from the boat launching ramp and overflow from the pond which flows into Pope Marsh. The overflow feature was designed into the system to avoid flooding of the marina facilities during storm events greater than the capacity of the infiltration pond.

2. Objectives

The objectives of the monitoring program are to:

- a. Ensure that storm water discharges, non-storm water discharges, and discharges associated with maintenance dredging are in compliance with the Discharge Prohibitions, Effluent Limitations, and Receiving Water Limitations specified in the General Permit.
- b. Ensure practices at the marina to reduce or prevent pollutants in surface water discharges, storm water discharges, and non-storm water discharges are evaluated and revised to meet changing conditions.
- c. Aid in the implementation and revision of the Storm Water Pollution Prevention Plan (SWPPP) for the marina.
- d. Measure the effectiveness of best management practices (BMPS) to prevent or reduce pollutants in storm water discharges.

3. Non-storm Water Discharge Visual Observations

- a. The Marina Operator will visually observe the boat ramp, parking lot, storage yard, and infiltration pond and pond overflow for the presence of unauthorized non-storm water discharges;
- b. The visual observations will occur monthly, during daylight hours, on days with no storm water discharges, and during scheduled marina operating hours. Observations will be made during each month that the marina is operating (typically May through October); and
- c. Records of visual observations (Worksheet on page B-1) will document the presence of any discolorations, stains, odors, floating materials, *etc.*, as well as the source of any non-storm discharge observed. Records will be maintained including visual observation dates, locations observed, conditions observed, and response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges. The SWPPP will be revised, as necessary, and implemented in accordance with the General Permit.

4. Storm Water Discharge Visual Observations

- a. The Marina Operator will visually observe storm water discharges from four storm events per operating season of the marina. These visual observations will occur during the first hour of discharge and at all discharge locations. Visual observations of stored or contained storm water in the infiltration pond will occur at the overflow location.
- b. Visual observations are only required of storm water discharges that occur during daylight hours that are preceded by at least three working days without storm water discharges and that occur during scheduled marina operating hours.
- c. Visual observations will document the presence of any floating and suspended material, oil and grease, discolorations, turbidity, odor, and source of any pollutants. Records will be maintained of observation dates, locations observed, observations, and response taken to reduce or prevent pollutants in storm water discharges (Worksheet on page B-2). The SWPPP will be revised, as necessary, and implemented in accordance with the General Permit.

5. Storm Water and Surface Water Sampling and Analysis

- a. The Marina Operator will collect storm water samples during the first hour of discharge from (1) the first storm event during the marina's operating season, and (2) at least one other storm event during the marina's operating season. Sampling will occur at the boat ramp entering Lake Tahoe and the infiltration pond overflow entering Pope Marsh. If samples from the first storm event are not collected, samples from two other storm events during the marina's operating season will be collected. The Annual Report will explain why the first storm event was not sampled.

- b. Sample collection is only required of storm water discharges that occur during scheduled marina operating hours and that are preceded by at least three working days without storm water discharge.
- c. The samples shall be analyzed for:
 - i. Turbidity, pH, specific conductance, total phosphorus (reporting limit for total phosphorus shall be 0.008 mg/L as total P), and total nitrogen (reporting limit for total nitrogen shall be 0.15 mg/L).
- d. The Marina Operator will collect a surface sample from Lake Tahoe from the lakeward end of the pier on July Fourth and Labor Day. The sample will be analyzed for benzene, toluene, ethylbenzene, total xylenes, and fuel oxygenates including methyl tertiary butyl ether (MTBE), tert-butyl alcohol (TBA), tertiary amyl methyl ether (TAME), di-isopropyl ether (DIPE), and ethyl tert-butyl ether (ETBE) using drinking water standards (524.2 GCMS). If these pollutants are not detected in significant quantities after four sampling events, the pollutant may be eliminated from future sample analysis or until the pollutant is likely to be present again.
- e. Sampling will be documented using the Worksheet on page B-3.

6. Storm Water Discharge Locations

The requirements of the General Permit are listed below with the Camp Richardson Marina response shown in *italics*.

- a. The Marina Operator will visually observe and collect samples of storm water discharges from all drainage areas that represent the quality and quantity of the marina's storm water discharges from the storm event.

All parking lot and storage yard run-off is collected and pumped to the infiltration pond. The only run-off directly reaching Lake Tahoe is from the boat launching ramp. Overflow from the pond flows to Pope Marsh which is tributary to Lake Tahoe. These are the only locations where storm water is discharged and both are included in the sampling plan.

- b. If the marina's storm water discharges are commingled with run-on from surrounding areas, the marina operator should identify other visual observation and sample collection locations that have not been commingled by run-on and that represent the quality and quantity of the marina's storm water discharges from the storm event. The marina operator may also choose to collect a sample up gradient of the marina influence and then down gradient of the marina prior to discharge.

Treated run-off from the Beacon Bar & Grill parking lot, adjacent to the marina, is also pumped to the infiltration pond. Overflow discharges from the pond will include run-off from both lots but should adequately represent marina the discharge since both parking lots

are used in a similar fashion. Run-off from the ramp area is directly attributable to the marina and indicative of marina activities.

- c. If visual observation and sample collection locations are difficult to observe or sample (e.g., sheet flow, submerged outfall), marina operators shall identify and collect samples from other locations that represent the quality and quantity of the marina's storm water discharges from the storm event.

The designated observation and sampling locations are readily accessible.

- d. Marina operators that determine that the industrial activities and BMPs within two or more drainage areas are substantially identical may either (i) collect samples from a reduced number of substantially identical drainage areas, or (ii) collect samples from each substantially identical drainage area and analyze a combined sample from each substantially identical drainage area. Marina operators must document such a determination in the Annual Report.

Not applicable to Camp Richardson Marina.

7. Visual Observation and Sample Collection Exceptions

The Marina Operator is prepared to collect samples and conduct visual observations at the beginning of marina's operating season and throughout the marina's operating season until the minimum requirements of Sections 4 and 5 are completed with the following exceptions:

- a. Sampling and visual observations may not be conducted due to dangerous weather conditions, such as flooding, electrical storm, *etc.*; when storm water discharges begin after scheduled marina operating hours; or, when storm water discharges are not preceded by three working days without discharge. Visual observations are only required during daylight hours. If the required samples or visual observations are not made during an operating season due to these exceptions, an explanation in the Annual Report as to why the sampling or visual observations could not be conducted will be provided.

8. Monitoring Methods

- a. This monitoring program satisfies the objectives listed in Section 2 by directly implementing the scope and monitoring requirements outlined in the General Permit. All components of the visual observation and sampling program are consistent with the standards established by the Regional Board in the Monitoring and Reporting Program of the General Permit. All samples will be analyzed by a licensed laboratory using methods specified by the Regional Board.
- b. This Monitoring Program incorporates "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is included as Appendix A.

9. Annual Report

An Annual Report will be submitted by November 15 of each year to the Executive Officer of the Regional Board. The report will include a summary of visual observations, sampling and analysis results (including laboratory reports), the Annual Comprehensive Site Compliance Evaluation Report (Evaluation Report) required in Section 8 of the SWPPP, and an explanation of why the marina did not implement any activities required by the General Permit (if not already included in the Evaluation Report).

The Marina Operator will prepare and the Annual Report using the Annual Report Form provided by the Regional Board.

10. Records

Records of all storm water monitoring information and copies of all reports (including the Annual Reports) required by the General Permit shall be retained for a period of at least five years. These records shall include:

- a. The date, place, and time of site inspections, sampling, visual observations, and/or measurements;
- b. The individual(s) who performed the site inspections, sampling, visual observations, and or measurements;
- c. Flow measurements or estimates;
- d. The date and approximate time of analyses;
- e. The individual(s) who performed the analyses;
- f. Analytical results, method detection limits, and the analytical techniques or methods used;
- g. Quality assurance/quality control records and results;
- h. Non-storm water discharge inspections and visual observations and storm water discharge visual observation records;
- i. Visual observation and sample collection exception records;
- j. All calibration and maintenance records of on-site instruments used; and,
- k. The records of any corrective actions and follow-up activities that resulted from the visual observations.

11. Maintenance Dredging

Camp Richardson Marina is an “open water” marina and does not anticipate conducting any Maintenance Dredging. Should unforeseen circumstances necessitate dredging in the future, this Monitoring Program will be amended to incorporate the dredging provisions found in Sections 11 and 12 of the Monitoring and Reporting for the General Permit.

HAEN ENGINEERING

208 PLAN FOR

MP RICHARDSON MARINA

JACON RESTAURANT AND

ON OF JAMESON BEACH ROAD

PROPOSED NEW ASPHALT PAVING

PROPOSED AC GRADE (NOTE: SLAB GRADIENTS 0.1' ABOVE FINISH A.C.)

Sample infiltration pond overflow

Sample sheet flow on ramp

Surface water sample from lakeward end of pier

Parking area drain inlet

Marina Storage Piling

Scale 1"=20'

North Arrow

ITEM	QUANTITY	UNIT
ASPHALT PAVING	1,000	SF
AC GRADE	1,000	SF
CONCRETE	1,000	SF
IRON PILING	1,000	LINEAL FEET
WOOD PILING	1,000	LINEAL FEET
STEEL PILING	1,000	LINEAL FEET
BRICK PAVING	1,000	SF
GRAVEL	1,000	CY
SAND	1,000	CY
CRUSHED ROCK	1,000	CY
CEMENT	1,000	SF
REINFORCING BARS	1,000	LINEAL FEET
WATER PUMP	1	UNIT
WATER TANK	1	UNIT
WATER PIPING	1,000	FEET
WATER VALVES	1,000	FEET
WATER METER	1	UNIT
WATER PUMP	1	UNIT
WATER TANK	1	UNIT
WATER PIPING	1,000	FEET
WATER VALVES	1,000	FEET
WATER METER	1	UNIT

NOTE: ALL BARNES ARMS AND MAILS DISTURBED BY CONSTRUCTION SHALL BE REVEGETATED TO ACCORDANCE WITH THE TYPICAL BARNES OF JOINT MANAGEMENT PLAN. APPLICATION OF A MULCH MAY ENHANCE VEGETATIVE ESTABLISHMENT.

HAEN ENGINEERING

208 PLAN FOR
MP RICHARDSON MARINA,
JACON RESTAURANT AND
ON OF JAMESON BEACH F

Sample infiltration pond overflow

TABLE: REGIONAL PLANNING AGENTS

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Figure 1

LEGEND

APPENDIX A

LAHONTAN RWQCB GENERAL PROVISIONS for MONITORING & REPORTING

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. **SAMPLING AND ANALYSIS**

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
 - i. Standard Methods for the Examination of Water and Wastewater
 - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board Executive Officer prior to use.
- d. The discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

- a. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
 - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
 - ii. In the case of a partnership, by a general partner;
 - iii. In the case of a sole proprietorship, by the proprietor; or

- iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
 - i. Name and telephone number of individual who can answer questions about the report.
 - ii. The Monitoring and Reporting Program Number.
 - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.

APPENDIX B

WORKSHEETS

for MONITORING & REPORTING

SAMPLING RECORD
Camp Richardson Marina Monitoring Program

Year: _____

STORM WATER SAMPLES				
Date		Taken at/by	Sent to Lab (date)	Lab Results (date)
1. _____	First Storm Yes __ No* __ First Hour Yes __ No* __	<input type="checkbox"/> Boat Ramp By: _____ Pond: <input type="checkbox"/> Overflow <input type="checkbox"/> No Overflow By: _____		
Three working days without discharge required prior to second sample.				
2. _____	First Hour Yes __ No* __	<input type="checkbox"/> Boat Ramp By: _____ Pond: <input type="checkbox"/> Overflow <input type="checkbox"/> No Overflow By: _____		
*If "No," explain: 1. _____ 2. _____				
SURFACE SAMPLES (from lakeward end of pier)				
Date		Taken by	Sent to Lab (date)	Lab Results (date)
1. July 4, 200__				
2. Labor Day (9/___/200__)				
If not taken, explain: 1. _____ 2. _____				

VISUAL NON-STORM WATER INSPECTION RECORD
Camp Richardson Marina Monitoring Program

Year: 200__ Date: __/__/__
 Inspection for month of: _____
 May __ June __ July __ August __ September __ October __ Completed by: _____

Location Observed	Conditions Noted	Cause of any unauthorized discharge
Boat Ramp		
Parking Lot		
Storage Yard		
Infiltration Pond		
Corrective Action Taken:		

VISUAL STORM WATER INSPECTION RECORD

Camp Richardson Marina Monitoring Program

Year: 200__ #1 __ #2 __ #3 __ #4 __ Date: __/__/__
 Storm #1 __ #2 __ #3 __ #4 __ Completed by: __

Location Observed	Conditions Noted	Cause of any unauthorized discharge
Boat Ramp		
Parking Lot		
Storage Yard		
Infiltration Pond		
Corrective Action Taken:		

ALL BARBER ARMS AND ARMS DISTURBED BY CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE TMDA HANDBOOK OF BEST MANAGEMENT PRACTICES. APPLICATION OF A MULCH MAY ENHANCE VEGETATIVE ESTABLISHMENT.

